



NAVSEA 04L5 Corporate CM ERP IPT

10 May 2001

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Overview

- ERP CM Improvement Plan
 - Initial Desktop Audit Results
 - BIW
 - LITTON SHIP SYSTEMS FSC
 - Minimum Critical Data Elements
 - Continuous Validation Concepts (PMS/SAP Confidence Level Criteria)
 - Leveraging Off Other Ship Visits (Execution Plan & Brief to ESC)
 - New Construction Data Transfer Concept
- Summary of April 19th NEMAIS CM Meeting
 - ESWBS Standardization Status
 - Proposed Data Flow Concepts for NEMAIS Phase A, C, & F
- Key Event Timeline for NEMAIS for Phase C
 - SAP Licensing
 - SAP Training
- Open Discussion

BIW DESKTOP AUDITS (*Preliminary Findings*)

DDG-51 Class

Data Element	CDM Impact	MH Estimate	MH Justification
RIC	Since the CDMD-OA edit checks already enforce this, just need to verify we don't have any errors of this type. Also need to check X-RICs and fix any that have been responded to by NAVICP.	4	Anticipate no errors will be found (0.5 hours); review X-RICs for responses from NAVICP which need resolution (should be few, if any, since we do this on a continuous basis)
EIC	Since the CDMD-OA edit checks already enforce this, just need to verify we don't have any errors of this type.	0.5	Anticipate no errors will be found.
	Randomly review 613 RT-2s.	31	Average about 20 per hour
Location	Examine all locations not on HMS Compartment Manifest and fix as needed (about 191).	17	Average about 12 per hour.
Parent RIC	Mostly covered by CDMD-OA edit checks. Need to check LSSCs of ?C to ensure Par RIC is filed (5 hits).	1	5 hits (1 hour);
Alt Type	Since the CDMD-OA edit checks already enforce this, just need to verify we don't have any errors of this type. Should also verify Alt Types are correct per RIC Nom.	8	Anticipate no errors will be found., 3,347 Alts to be reviewed against RIC Nom (500 per hour plus 2 hours for any research required)
Alt ID Number	Mostly covered by CDMD-OA edit checks - need to verify we don't have any errors of this type. Also need to ensure all OAs are in correct format. Should also verify Alt IDs are correct per RIC Nom.	1	Anticipate no errors will be found; Anticipate no OA's need fixing; RIC Nom check time included in Alt Type check (can be done at same time).
Alt Status	Since the CDMD-OA edit checks already enforce this, just need to verify we don't have any errors of this type.	0.5	Anticipate no errors will be found.
Alt RIC	Since the CDMD-OA edit checks already enforce this, just need to verify we don't have any errors of this type. Also need to check X-RICs and fix any that have been responded to by NAVICP.	0.5	Anticipate no errors will be found (0.5 hours); review X-RICs for responses from NAVICP which need resolution (should be few, if any, since we do this on a continuous basis).
SAC	Since the CDMD-OA edit checks already enforce this, just need to verify we don't have any errors of this type.	0.5	Anticipate no errors will be found.
	Randomly review 613 RT-2s.	30	Average about 20 per hour
WCRC	Review against PMS-4 report (per TYCOM [Bob Milburn] this is a more accurate source of valid work centers than the SOF) and fix/work with ship on any incorrect values. Present WCRC blank = 649 w/437 XSYSTEM/XCOMPRTMNT Records. Ship is OMMS-NG, So WCRC not c	40	(Rough guess based on SLV's work with PMS-4 report on FFG-48.)

TOTAL M/H=134

FFG-7 Class

Data Element	CDM Impact	MH Estimate	MH Justification
RIC	Since the CDMD-OA edit checks already enforce this, just need to verify we don't have any errors of this type. Also need to check X-RICs and fix any that have been responded to by NAVICP.	4	Anticipate no errors will be found (0.5 hours); review X-RICs for responses from NAVICP which need resolution (should be few, if any, since we do this on a continuous basis)
EIC	Since the CDMD-OA edit checks already enforce this, just need to verify we don't have any errors of this type.	0.5	Anticipate no errors will be found.
	Randomly review 350 RT-2s.	16	Average about 20 per hour
Location	Examine all locations not on HMS Compartment Manifest and fix as needed (about 600).	50	Average about 12 per hour.
Parent RIC	Mostly covered by CDMD-OA edit checks. Need to check LSSCs of ?C to ensure Par RIC is filed (162 hits).	15	5 errors to fix (1 hour); 162 hits @ 12/hr (14 hours)
Alt Type	Since the CDMD-OA edit checks already enforce this, just need to verify we don't have any errors of this type. Should also verify Alt Types are correct per RIC Nom.	7	Anticipate no errors will be found., 2,038 Alts to be reviewed against RIC Nom (500 per hour plus 2 hours for any research required)
Alt ID Number	Mostly covered by CDMD-OA edit checks - need to verify we don't have any errors of this type. Also need to ensure all OAs are in correct format. Should also verify Alt IDs are correct per RIC Nom.	1	Anticipate no errors will be found; Anticipate no OA's need fixing; RIC Nom check time included in Alt Type check (can be done at same time).
Alt Status	Since the CDMD-OA edit checks already enforce this, just need to verify we don't have any errors of this type.	0.5	Anticipate no errors will be found.
Alt RIC	Since the CDMD-OA edit checks already enforce this, just need to verify we don't have any errors of this type. Also need to check X-RICs and fix any that have been responded to by NAVICP.	0.5	Anticipate no errors will be found (0.5 hours); review X-RICs for responses from NAVICP which need resolution (should be few, if any, since we do this on a continuous basis).
SAC	Since the CDMD-OA edit checks already enforce this, just need to verify we don't have any errors of this type.	0.5	Anticipate no errors will be found.
	Randomly review 350 RT-2s.	16	Average about 20 per hour
WCRC	Review against PMS-4 report (per TYCOM [Bob Milburn] this is a more accurate source of valid work centers than the SOF) and fix/work with ship on any incorrect values.	40	(Rough guess based on SLV's work with PMS-4 report on FFG-48.)

TOTAL M/H=151

LITTON DESKTOP AUDITS (*Preliminary Findings*) (CG 49 and DD 963 Classes)

C = Class level review accomplished as a one time class wide review

S= Ship level review to be accomplished prior to transition to SAP (CG-56, DD-982, DD-988)

Matrix values = Data elements changed/Percent complete

ESWBS	S. EDITS		S. RIC	C. ESD	C. EIC	C. EFD	C.SAC	S. LOC.	C. PAR RIC	S. WCRE	C. SN	MHRS
	M	W		MATCH								
16711						20/15%						0.25
23411					2500/100%	66/100%	66/100%					0.75
23412					2500/100%	66/100%	66/100%					0.75
23413					2500/100%	66/100%	66/100%					0.75
23414					2500/100%	66/100%	66/100%					0.75
51111						20/50%						0.1
51211					1102/50%							0.15
51411					5795/90%							0.25
52111				1502/100%	200/90%		865/100%				703/30%	0.5
58331					250/50%							0.1
STANDARDIZED 16,596 locations on AEL records to read AEL												0.5

CM Process Improvement Plan

- CDM/ISEA Data Element Committee (***Proposed Critical Data Elements***)

1. Minimum core data elements required to identify configuration and drive parts aboard ship		
Data Element	Functionality	Comment
UIC	Identification of the configuration item (CI) end-user (usually a Navy or Coast Guard vessel or a shore facility)	
RIC	Identifies the physical attributes of the CI and is the link to parts data for the configuration item	
Alteration RIC	Identifies the physical attributes of the CI and is the link to detailed characteristic and parts data for the CI	
RIC Nomenclature	"Plain language" description of the physical CI	
HSC	Unique functional identifier that places a CI within defined boundaries (usually a ship system) in the context of its functional relationship with other CIs contained within the same boundaries	
EFD	"Plain language" description of a functional CI that corresponds with the item's HSC	
ISC	Identifies whether the CI is installed, planned for installation, or planned for removal	
Equipment Serial Number	Allows differentiation between, and specific identification of, physically and/or functionally similar CIs.	Serial number, PRID, and EIN generally serve the same purpose for different types of CI, although more than one of these data elements (but rarely all three) may frequently be applicable to a single CI.
PRID	Allows differentiation between, and specific identification of, physically and/or functionally similar CIs.	
EIN	Allows differentiation between, and specific identification of, physically and/or functionally similar CIs.	
Location	Identifies the physical location of the CI within the	

CM Process Improvement Plan (cont..)

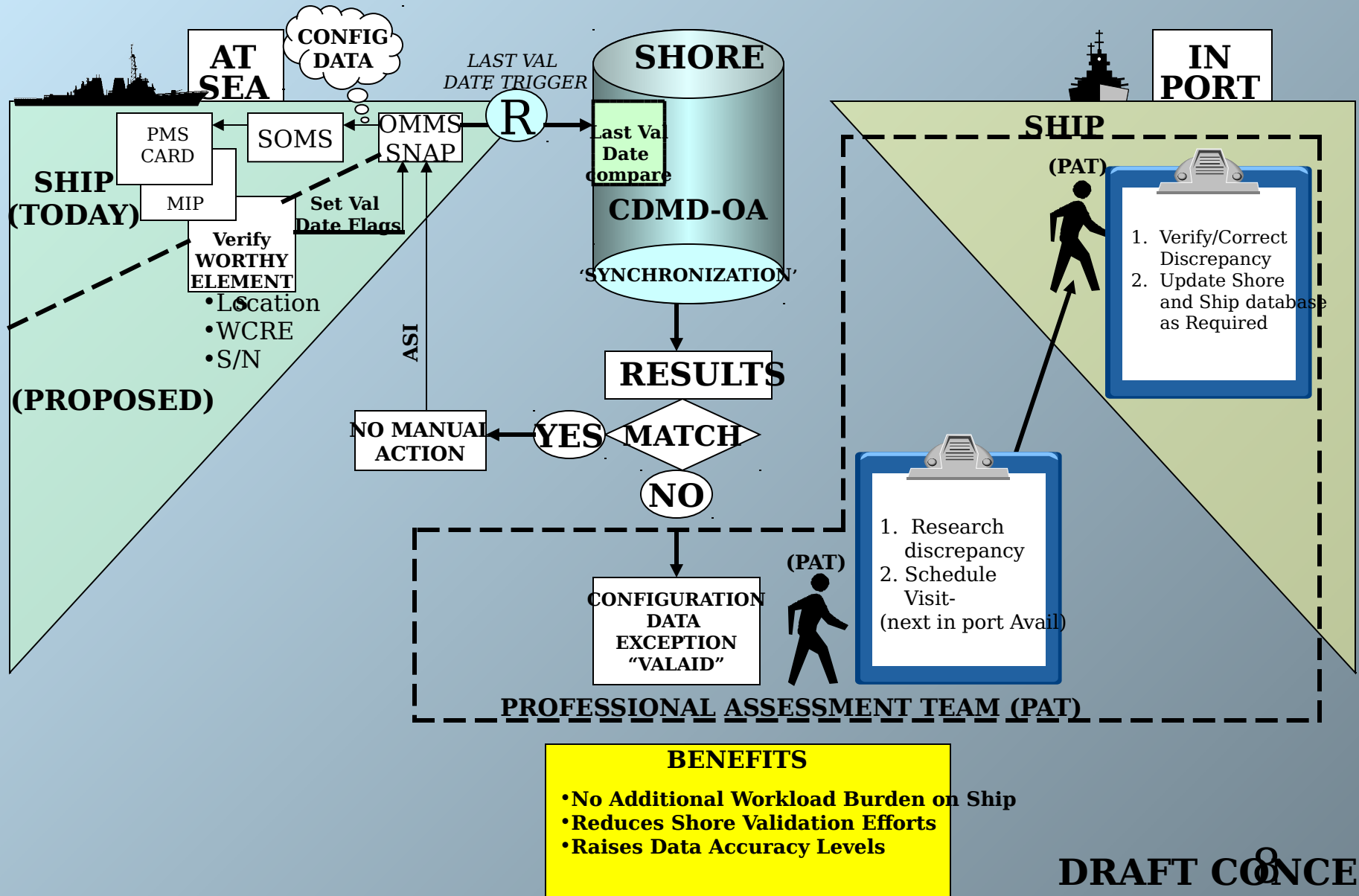
- CDM/ISEA Data Element Committee (***Proposed Critical Data Elements***)

Continued

Parent S/N	Identifies the CI's physical relationship with a parent CI	
Parent RIC	Identifies the parent CI that provides supply support	
Alteration Type	Identifies the category of a CI that alters the physical characteristics and/or supply support of another CI when installed	
Alteration ID	Identifies the specific CI (within the category of CIs defined by Alteration Type) that alters the physical characteristics and/or supply support of another CI when installed	
Quantity	Identifies how many individual equipment items are included in the CI	
AEL Column Number	Identifies the appropriate level of equipage item(s) provided to an end-user using criteria usually defined within the (AEL) RIC characteristics data	

- Continuous Validation (***Proposed Concept***)
 - *Bridging Logistics & Maintenance Requirements to Audit & Increase Configuration Data Quality, using Planned Maintenance Mission Critical Criteria, Improves Fleet Readiness and Supports SEA04L5 CM Improvement Initiatives*
 - PMS = Use existing Process to Audit Select Data Elements
 - SAP = Maximize SAP Functionality to Audit Critical Data Elements during planning for 2Kilo Work Orders in SAP
 - » Generate “Record Quality” Work Order in SAP

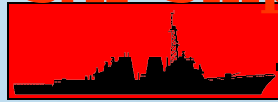
PROPOSED PMS VALIDATION CONCEPT (CONTINUOUS VALIDATION)



PROPOSED SAP CONCEPT (CONTINUOUS

VALIDATION

SAP Ship



2K



Maintenance
Planner

Validation
Override
?

Work Order
(Planning)

Validate
Critical Data
Elements

**SUB
ORDER**
"Valaid Like"

Confidence Level High

HIGH

SUB-ORDER
(RECORD QUALITY CRITERIA)

VAL WORTHY
LAST VAL DATE

LAST MAINT DATE, ETC

OPERATIONS

(Confidence Level Analysis)

- Val Worthy
- Last Val Date
- Last Maint Date
- State/Status
- Installed
- Matl Condition
- Scheduled for ALT

LOW

Confidence Level Low

L/H

9

DRAFT CONCEPT

CM Process Improvement Plan (cont.)

OPEN DECISIONS

(Proposed Continuous Validation Concept)

- What Level of Confidence is Acceptable (100%) ?
- Use Critical Data Elements as Baseline for Record Quality Criteria ?
- Concept Based on Maintenance should Validation Periodicity be same ?

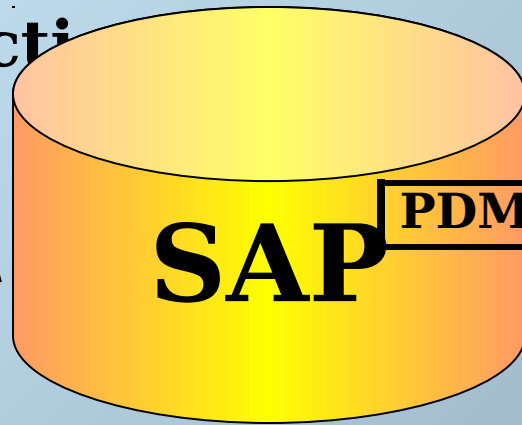
CM Process Improvement Plan (cont.)

- Leveraging Off Shipboard Visits (***Proposed Concept***)
 - Maximize and Capitalize on Experienced Professionals During all Ship Visits to Identify Incomplete Logistics Products and Verify Accuracy of Critical Data Elements
 - Develop Execution Plan
 - Capabilities, Training, Data Collection & Correction, Other
 - Brief FM ESC on Proposed Concept

CM Process Improvement Plan (cont.)

- Examples of Current Shipboard Visits
 - CDM
 - Work Packages, Installation AIT
 - NSA
 - Scheduled Validations
 - ISEA (AIRLANT/PAC)
 - C5RA, ILR, CEMAT, OSLR, ESU, UMAT, ALRE, EQOL, MSC, SBMS
 - FTSC (LANT/PAC)
 - C5RA, SEMAT, PSART, AIT
 - SPAWAR
 - AIT Installations
 - Other Visits

New Construction (PDM-CM)

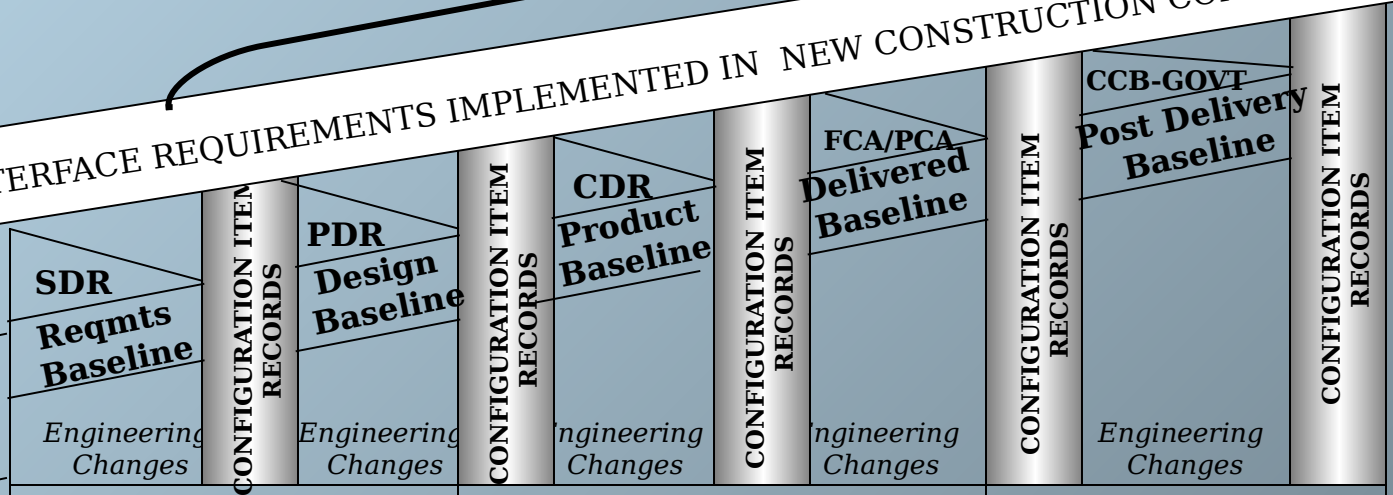


**Navy
Configuration
Database
of Authority**



NAVSEA 04L DATA INTERFACE REQUIREMENTS IMPLEMENTED IN NEW CONSTRUCTION CONTRACTUAL POL

**GOVT/JOINT
CONTRACTOR
TECH REVIEWS**
**VENDOR/
CONTRACTOR**



Summary

- Highlights
 - Legacy Data will be Populated as Characteristics Data in SAP
 - Bi-directional Interface with CDMD-OA to be Defined
 - ESWBS Structure Compatible with Functional Location Structure to the sixth digit
 - Piece Parts will be loaded first as Material Master Records and related to the appropriate Equipment Master Records using RIC
 - Phase A CDMD-OA is Configuration Authority
- Open Actions
 - Volume and Type of Licenses and Training
 - File Format for EDI Transaction Bi-directional Interface
 - Data Storage and Sizing Requirements
 - Loading Time & Sequence of Ships Configuration Data
 - SAP Reference Location Functionality for Class Wide Mass Updates
 - CDMD-OA Updates of SAP Data

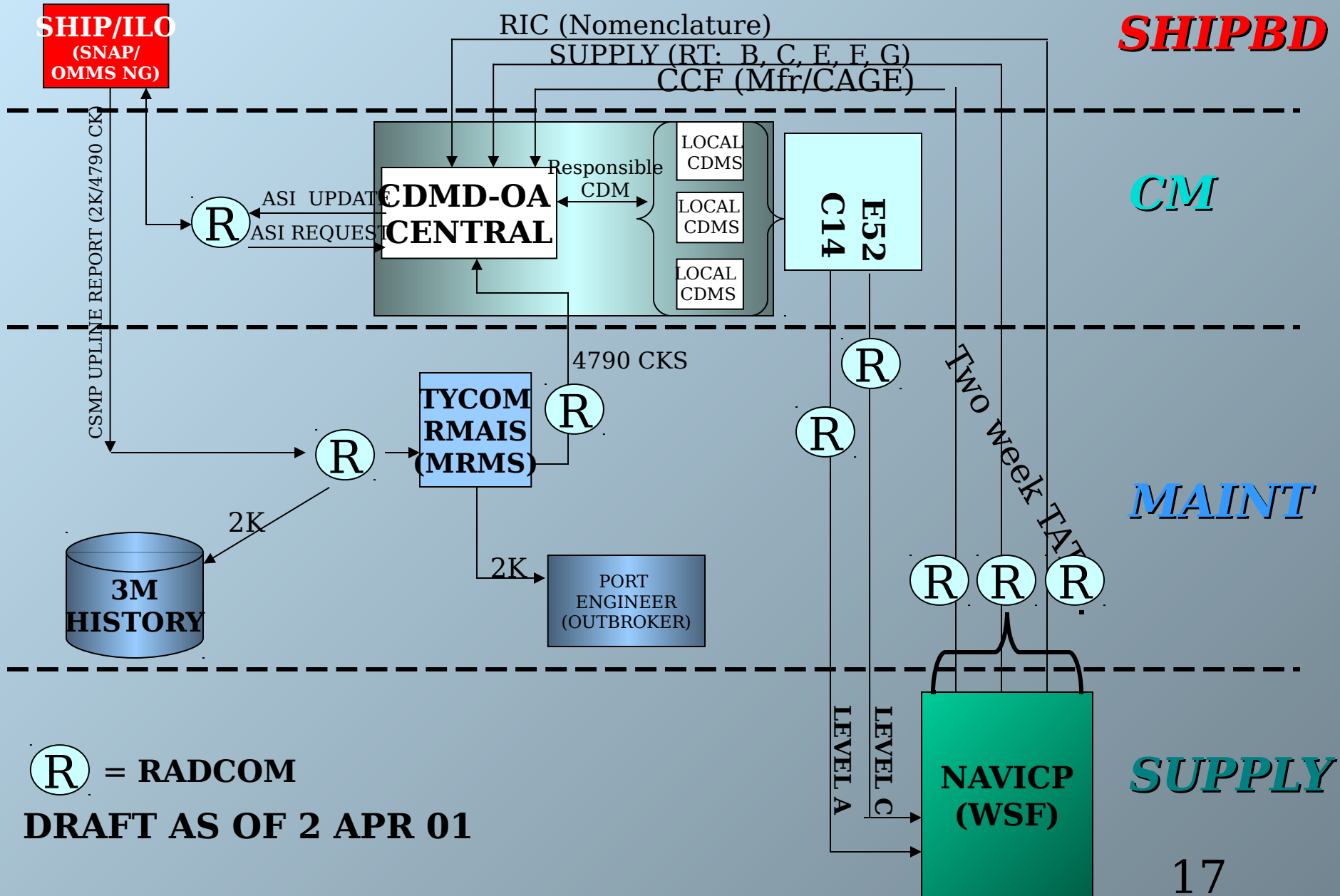
Summary (cont.)

- ESWBS Standardization
 - Today
 - Different Types of ESWBS Schemas
 - FFG-7, FFG-61, CG-47, DDG-51, Trident, Seawolf, New Attack (SSN-774), SSN-688
 - Standardization allows for Navy Fleet/Class wide ESWBS trend analysis
 - Future
 - A Standardized ESWBS Structure is desired by SAP
 - Creating a “Cross Reference Table” allows SAP to use a single ESWBS for specific equipment regardless of Ship Class across the entire Fleet instead of just within a single Ship Class.
- NSLC Mechanicsburg, Jerry Koehler
 - Methodology for ESWBS Standardization

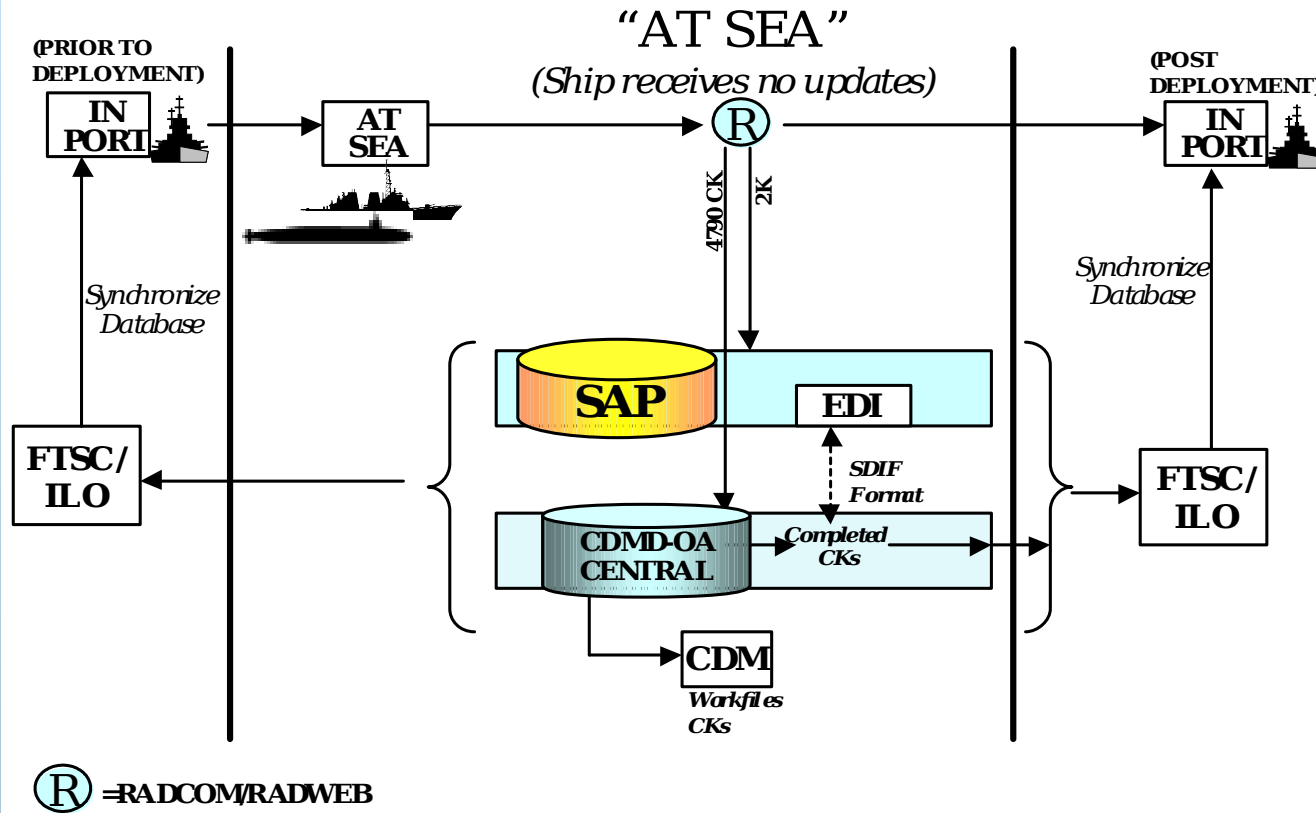
Summary (cont.)

- Today, Data Flow
- Future, Suspend ASI processing at Sea (**Proposed Concept**)
- Future, Data Flow, Phase A (**Proposed Concept**)
- Future, Data Flow, Phase C (**Proposed Concept**)
- Future, Data Flow, Phase F (**Proposed Concept**)

TODAY-SHIP GENERATED CHANGE FLOW



FUTURE-SUSPENDED ASI PROPOSAL



BENEFITS

- Reduce Workload on ship-not having to download and run ASIs
- Saves TYCOM OPTAR for ships not in Battle Group Deployment status (Reduced Satellite time)
- Shore activity ASI loading

OPEN DECISIONS

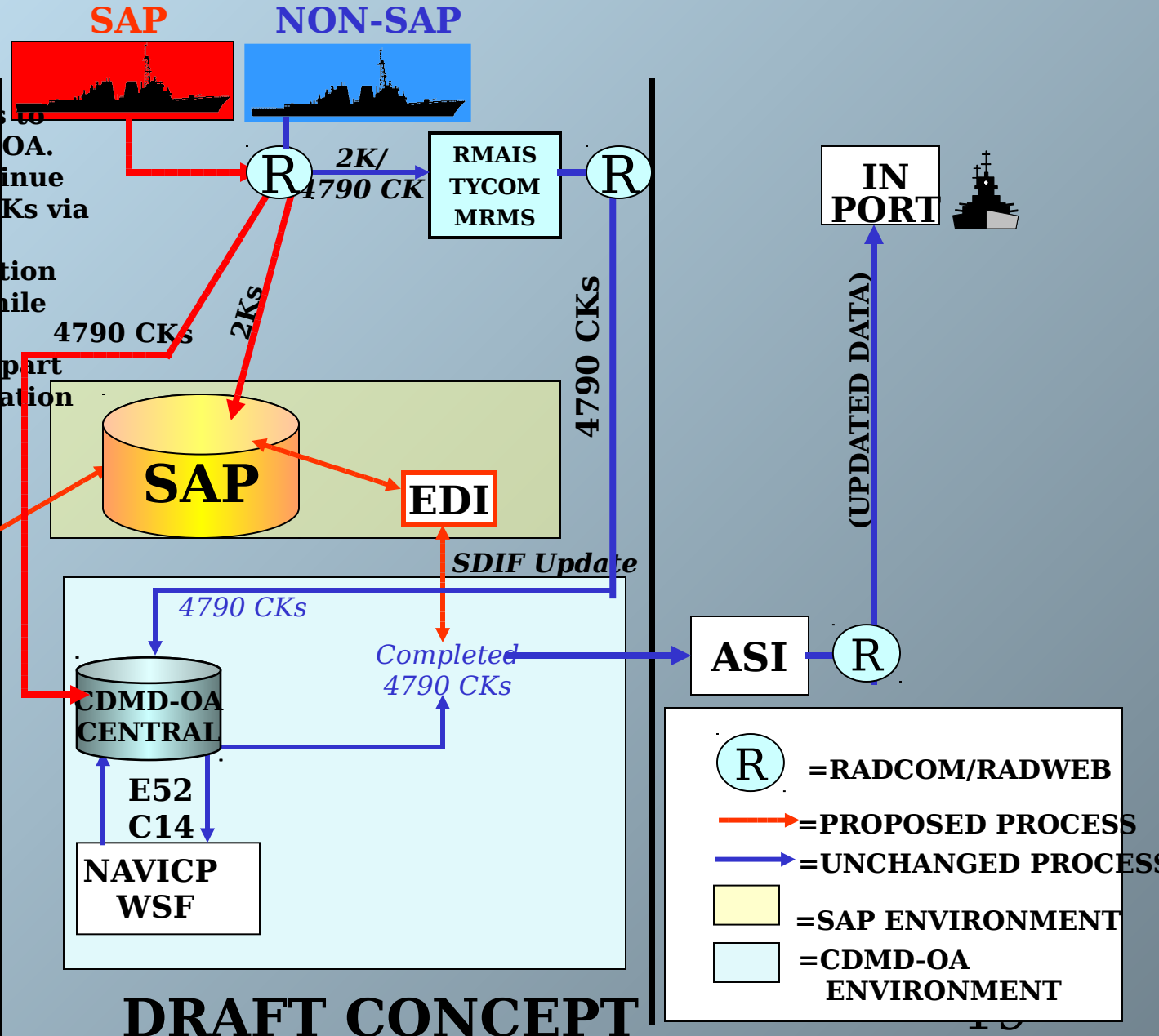
- Define Deployment in these circumstances
- Need to process non-maint data from ship during deploy (upline changes from ship to CDM)?
- Method for Modernization adds
- Carriers/forward deployed ships continued receipt of ASIs during

PROPOSED FUTURE NEMAIS PHASE

PHASE A

1. SAP ships will send 2Ks to SAP and CKs to CDMD-OA. Non-SAP ships will continue to send both 2Ks/4790CKs via existing process
2. SIMA to capture Validation worthy element data while closing out 2Ks
 - Update CDMD-OA as part of progressive purification of data effort

PORT
ENGINEER
(OUTBROKER)



PROPOSED FUTURE NEMAIS PHASE

PHASE C

1. SAP/Non SAP ships provide CKs/2Ks in SAP
2. Create "ASI LIKE" program to update ship DB in port
3. Use EDI Transaction Interface for Legacy Databases (if required)
4. AT SEA ships receive no ASI updates.

PORT
ENGINEER
(OUTBROKER)

2Ks

SAP

NON-SAP

R

RMAIS
TYCOM
MRMS

4790 CKs
2Ks

2K/
4790 CK

SAP
ISEA (BOM)
3M
CDM

Data Update

EDI

"ASI
LIKE"
program

IN
PORT



UPDATED DATA

R

AIT ISEA IMA
FTSC S/Y

Sources
of Support

WSF

E52
C14

R

=RADCOM/RADWEB

=PROPOSED PROCESS

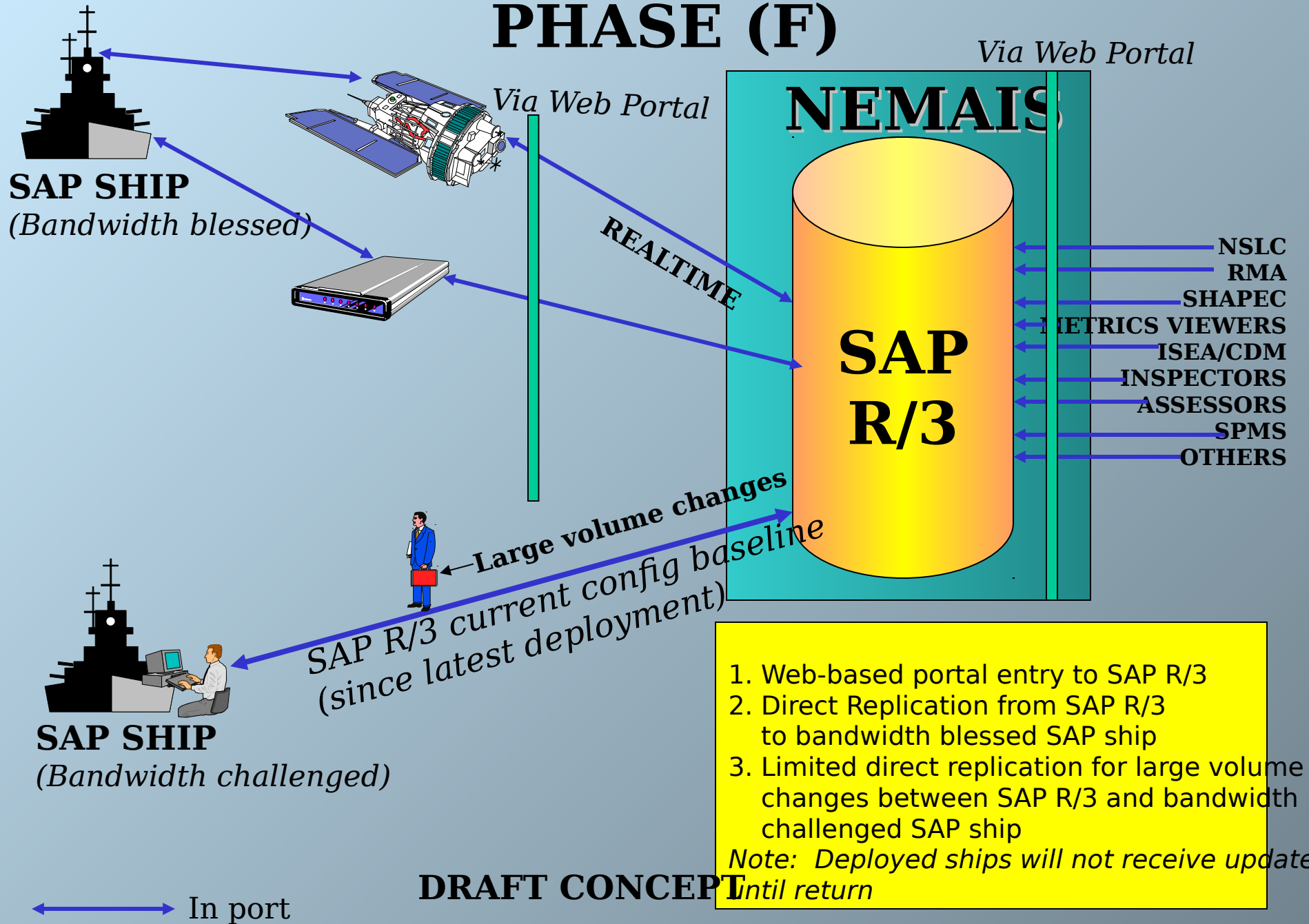
=UNCHANGED PROCESS

=SAP ENVIRONMENT

DRAFT CONCEPT

PROPOSED FUTURE-NEMAIS

PHASE (F)



NEMMAIS KEY EVENTS- PHASE C

- SAP Licenses
 - Integrator contract provisions for concurrent users
 - Differential cost factors for level of access
- SAP Training
 - Govt Lead Training POC -Buddy Holloway
 - *Train the Trainer* courses (30 people) being conducted
 - Curriculum/training materials currently being developed
 - End User Training scheduled for Sep/Oct 01 Timeframe

OPEN DISCUSSION

- Action Items
- Date and Topics for Next IPT